

8. The angular detection system of claim **1**, wherein the light altering component includes an encoder disk having a plurality of slots that together form a binary code generator.

9. The angular detection system of claim **8**, wherein different rotational positions of the encoder disk result in different binary code readings at the light sensing component.

10. The angular detection system of claim **8**, wherein the light source component includes a plurality of light emitting diodes and the light sensing component comprises a corresponding plurality of photodiodes.

11. The angular detection system of claim **1**, wherein the light altering component includes a first polarizer and the light source component emits polarized light.

12. The angular detection system of claim **11**, wherein different rotational positions of the first polarizer result in different light strength readings at the light sensing component.

13. The angular detection system of claim **11**, wherein the light altering component includes a second polarizer that is rotationally offset from the first polarizer, and wherein the light sensing component includes a first photo-sensor for the first polarizer and a second photo-sensor for the second polarizer.

14. An electronic device comprising:

a first device component;

a second device component rotationally coupled to the first device component; and

an angular detection system configured to detect an angle of orientation of the first device component with respect to the second device component, the angular detection system including:

a light source,

a sensor disposed proximate the light source and configured to detect light emitted therefrom, and

a light altering component configured to affect light emitted from the light source, wherein a variable

rotation of the light altering component corresponds to a variable rotation of the first electronic device component with respect to the second electronic device component.

15. The electronic device of claim **14**, wherein the first device component is an upper component of a laptop computer and the second device component is a base component of the laptop computer.

16. The electronic device of claim **14**, further comprising: a controller in communication with the sensor and configured to receive a signal therefrom regarding detected light, wherein the controller is further configured to determine an orientation angle of the first device component based upon the detected light.

17. The electronic device of claim **14**, wherein the light altering component includes an encoder disk having a plurality of slots that together form a binary code generator.

18. The electronic device of claim **14**, wherein the light altering component includes one or more polarizers and the light source emits polarized light.

19. A method for putting an electronic device into a sleep mode, the method comprising:

determining an angle of orientation for a light altering component located within the electronic device between a light source and a sensor, wherein the light altering component is configured to rotate with respect to one or more components within the electronic device; and

putting the electronic device into the sleep mode when the angle of orientation indicates that the electronic device is closed.

20. The method of claim **19**, further comprising:

detecting light at the sensor after the light has been affected by the light altering component.

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